

BMGR & Ajo Air Radar Station

Boundaries:

The Barry M. Goldwater Range (BMGR) is located in southwest Arizona, and consists of over 2.7 million acres in Maricopa, Pima and Yuma Counties, from Yuma to Gila Bend, and bordered by Mexico to the south.

Two recent projects include the Ajo Radar Station, and the munitions area known as “Area A”. The Ajo Radar Station, also known as Site SD-02, is located at Childs Mountain, just east of BMGR and approximately five miles north of Ajo. The site occupies part of the Cabeza Prieta Wildlife Refuge in the southern portion of the BMGR. The munitions clearance project consists of a 74,000 acre area in the southeast portion of the range called “Area A”. The site is located approximately 14 miles east of the Gila Bend Air Force Auxiliary Field.

Site History:

The Barry M. Goldwater Range, formerly called the Luke Air Force Range, was developed in 1941 to provide training for air crews in aerial and air-to-ground combat and for the evaluation of new weapons and tactics necessary to develop skills for national defense. The range was expanded in 1962 and is still being used for training today.

The Military Lands Withdrawal Act of 1986 (P.L. 99-606), was used to withdraw the land for the BMGR and expired in 2001. The Defense Authorization Bill for Fiscal Year 2000 approved language extending the withdrawal for another 25 years.

Ajo Radar Station

- The Ajo Radar Station was constructed by the U.S. Air Force in 1956 to 1958. Operations at the station were terminated in 1971 and the facility was abandoned the following year. The area referred to as Site SD-02 was located adjacent to the motor pool building with a buried pipe extending from the sump to an outfall at the edge of the bluff just east of the sump. The sump was used to collect used oil from facility-support shops in the area. The used oil in the sump would be pumped out and disposed. Known chlordane and lead impacts are believed to have resulted from the direct outfall pipe discharge to the soil below.
- In November 1997, soil samples were taken in the excavated area. The results indicated chlordane contamination at levels above 1 mg/kg throughout the first 55 feet of the excavation area. The middle ten feet of the excavation area to a distance of 80 feet down the hill still contained contaminated soil. In February 1998, soil excavation occurred again. A total of 41 55-gallon drums of soil and rock were removed.
- Upon completion of the last soil excavation, samples collected from the area revealed areas where soils exceeded the remediation goal of 1 mg/kg for chlordane. Because of its rocky environment, additional soil removal was deemed impossible or not cost-effective.

In October 2002, a rock cover was installed to cover the former chlordane contaminated area to minimize possible exposure to humans and animal life. Roads which had been created during project activities were back graded and hill contours restored. The bluff area of the site was re-seeded with a mixture as specified by the U.S. Fish & Wildlife Services (USFWS).

Area A Munitions Targets

- Historical records indicate that Luke Air Force Base operated an Airborne Controller Course in May to August of 1953. The specialized range now called “Area A” comprised of simulated enemy bunkers, trenches, supply areas, artillery, and tank targets. The project area comprises of four inactive targets: the convoy area, artillery area, bridge and wooden structure targets. The training area was along a canyon that is separated by a mountain range from the East Tactical Range which is still actively used for training maneuvers.
- Luke Air Force Base Explosive Ordnance Disposal (EOD) personnel conducted a survey within “Area A” in September of 2001 and June of 2002. A summary of munitions identified during the survey included 2.25 inch Sub-caliber Aircraft Rockets, M38A2 100-lb practice bombs, 25-lb practice bombs, fragmentation from a 2.75 inch white phosphorous and high explosive rocket warheads, fragmentation from a large, heavy-cased high explosive munitions, M117 750-lb demolition bomb, expended smoke grenades and parts of a 5-inch rocket warhead.
- The property comprises of public lands that were returned to the Bureau of Land management (BLM) in 1999 when the military determined that they no longer required the land for training. Part of the land is in the Sonoran Desert National Monument. BLM requested that 67 miles of wilderness roads be surveyed for clearance of munitions.

Site Status:

Ajo Radar Station

- As of October 2002, the remedial action at the Ajo site has been completed. The USFWS has accepted the remediation activities as complete as it pertains to the Cabeza Prieta Wildlife Refuge.
- A Decision Document which addressed final closure issues at SD-22 was completed in November 2003.

Area A Munitions Targets

- Access to the Area A portion is “by permit only” and remains a buffer between the general public and BMGR activities to the south. Signage is posted to alert users to the potential presence of hazardous unexploded ordnance.

- A geophysical study was begun using a towed array of non-metallic composite material to clear the 67 miles of roads in December 2004. Soil samples are to be taken at the targets and geophysics will be done to further investigate the target areas.

Site Hydrogeology:

- The BMGR is situated in the Basin and Range Lowlands hydrogeologic province characterized by isolated mountain ranges of crystalline rocks separated by alluvial valleys and basins. The mountains serve as aquifer boundaries. The basins are tectonically depressed troughs that have been filled to depths of several thousand feet with unconsolidated alluvium eroded from the mountains. Faulting is common at the margins of the basins as well as in other portions of the basins.
- Most of the ground water storage is found within the inter-mountain basins. Surface runoff from rainfall carries water to closed alluvial basins or into generally dry washes. Potential aquifers in the BMGR basins are found in coarse gravel and sand wedge zones. Depth to groundwater at the BMGR ranges from 24 feet to 663 feet.

Contaminants:

Past contaminants of concern at the Ajo Air Station were petroleum hydrocarbons, organochloride insecticides (chlordane), PCBs, volatile organic compounds, semi-volatile organic compounds, and heavy metals. Contaminants in the soil from munitions may include lead or explosive residue. Contaminants of concern at the site may change as new data become available.

Public Health Impact:

There are no known exposure pathways or health risks. All exposure pathways have been eliminated through removal and/or ground cover.

Community Involvement Activities:

No community involvement activities are planned at this time.

Information Repository:

Interested parties can review site information at the ADEQ main office located at 1110 West Washington Street, Phoenix. With 24 hour notice, an appointment to review relating documentation is available Monday through Friday from 8:30 a.m. to 4:30 p.m., at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix, Arizona. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment to review these documents.

Contacts:

Name	Phone/Fax	E-mail
Brian Stonebrink, ADEQ Project Manager	(602) 771-4197*/ (602) 771-4272	stonebrink.brian@azdeq.gov

* In Arizona, but outside the Phoenix area, call toll-free at (800) 234-5677.